

A BILL FOR AN ORDINANCE AMENDING CHAPTER 12, ARTICLE 6, KAUAI COUNTY CODE 1987, AS AMENDED, RELATING TO THE ENERGY CODE

BE IT ORDAINED BY THE COUNCIL OF THE COUNTY OF KAUAI, STATE OF HAWAII:

SECTION 1. Chapter 12, Article 6, Kauai County Code 1987, as amended, is hereby amended to read as follows and all other and prior ordinances or parts of ordinances in conflict herewith are hereby repealed.

"ARTICLE 6. ENERGY CONSERVATION CODE

Section 12-6.1 Purpose.

This ordinance is for the purpose of adoption and incorporation by reference the 2015 Edition of the International Energy Conservation Code as the Energy Code; providing amendments thereto, regulating the construction, alteration, or equipment of buildings or structures in the County of Kauai. This code will recognize the need for a modern, up-to-date energy conservation code that addresses the design of energy-efficient building envelopes and installation of energy efficient mechanical, lighting, and power system through requirement emphasizing performance.

Section 12-6.2 Title.

This Article shall be known as the Energy Conservation Code of the County of Kauai, and may be cited as the "Energy Code."

Section 12-6.3 Adoption of the International Energy Conservation Code.

The International Energy Conservation Code (IECC), 2015 Edition, as copyrighted and published in 2015 by the International Code Council, Incorporated, 4051 West Flossmoor Road, County Club Hills, Illinois 60478-5795, is by reference incorporated herein and made a part hereof as the Energy Code, subject to the following amendments.

Section 12-6.4 Local Amendments to the IECC.

(1) Amending Section C101.1. Section C101.1 is amended to read as follows:

C101.1 Title. This code shall be known as the Energy Conservation Code of the County of Kauai, and shall be cited as such. It is referred to herein as "this code."

(2) Amending Section C103.1. Section C103.1 is deleted in its entirety and replaced with the following:

C103.1 General. Construction documents and other supporting data shall be submitted to indicate compliance with this code. The construction documents shall be prepared, designed, approved, and observed by a duly registered licensed professional as required by Chapter 464 of the Hawai'i Revised Statutes. The responsible design professional shall provide on the plans a signed statement certifying that the project is in compliance with this code.

EXCEPTIONS:

1. Any building, electrical, or plumbing work that is not required to be prepared, designed, approved, or observed by a licensed professional architect or engineer pursuant to chapter 464 Hawai'i Revised Statutes shall be certified by the owner.

Specifications and necessary computations need not be submitted when authorized by the Building Official.

(3) Amending Section C103.3.1. Section C103.3.1 is amended to read as follows:

C103.3.1 Approval of construction documents. Approval of construction documents shall comply with the provisions of Chapter 1 of the International Building Code, as amended by Chapter 12 of the K.C.C. 1987, as amended.

(4) Delete Sections C103.3.2 and C103.3.3. Sections C103.3.2 and C103.3.3 are deleted.

(5) Amending Section C103.5. Section C103.5 is amended to read as follows:

C103.5 Retention of construction documents. Retention of construction documents shall comply with the provisions of Chapter 1 of the International Building Code, as amended in Chapter 12 of the K.C.C. 1987, as amended.

(6) Amending entire Section C104. The entire Section C104 is amended to read as follows:

SECTION C104
INSPECTIONS

C104.1 General. Inspections shall comply with the provisions of Chapter 1 of the International Building Code, as amended in Chapter 12 of the K.C.C. 1987, as amended.

(7) Amending entire Section C107. The entire Section C107 is amended to read as follows:

SECTION C107

FEES

C107.1 General. Fees shall comply with the provisions of Chapter 1 of the International Building Code, as amended in Chapter 12 of the K.C.C. 1987, as amended.

(8) Amending entire Section C108. The entire Section C108 is amended to read as follows:

SECTION C108

STOP WORK ORDER

C108.1 General. Stop Work Orders shall comply with the provisions of Chapter 1 of the International Building Code, as amended in Chapter 12 of the K.C.C. 1987, as amended.

(9) Amending the entire Section C109. The entire Section C109 is amended to read as follows:

SECTION C109

BOARD OF APPEALS

C109.1 General. All cases of appeals shall comply with the provisions of Chapter 1 of the International Building Code, as amended in Chapter 12 of the K.C.C. 1987, as amended.

(10) Adding Exception to Section C401.2. Section C401.2 Exception is added to read as follows:

Exception: Where it is determined by the code official that the building configuration is similar to that of a residential building, the requirements in Sections R41.2.1 Tropical Zone shall be permitted to be used.

(11) Amending Section C402.1.1. C402.1.1 is amended to read as follows:

C402.1.1 Low-energy use buildings. The following low-energy buildings, or portions thereof separated from the remainder of the building by building thermal envelope assemblies complying with this section, shall be exempt from the building thermal envelope provisions of Section C402.

- 1. Those with a peak design rate of energy usage less than 3.4 Btu/h-ft² (10.7 W/m²) or 1.0 watt per square foot (10.7 W/m²) of floor area for space conditioning purposes.**
- 2. Unconditioned space that does not contain habitable space.**
- 3. Greenhouses.**

(12) Amend the following items included in Table C402.1.3 Opaque Thermal Envelope Insulation Minimum Requirements, R-Value Method, for "All Other" and "Group R" columns, as follows:

<u>Climate Zone 1</u>	<u>All other</u>	<u>Group R</u>
<u>"Metal Buildings</u>	<u>R-30 or</u> <u>R-19 with cool roof</u>	<u>R-30 or</u> <u>R-19 with cool roof</u>
<u>Attic and other</u>	<u>R-30 or R-19 w/ cool roof</u>	<u>R-30 or R-19 w/ cool roof"</u>

(13) Amending Section C402.2.3. Section C402.2.3 is amended to read as follows:

C402.2.3 Thermal resistance of above-grade walls. The minimum thermal resistance (R-value) of materials installed in the wall cavity between framing members and continuously on the walls shall be as specific in Table C402.1.3, based on framing type and construction materials used in the wall assembly.

Exceptions:

Continuous insulation for wood, metal framed, and mass walls are not required when one of the following conditions are met:

1. Walls have a covering with a reflectance of ≥ 0.64
2. Walls have overhangs with a projection factor equal to or greater than 0.3. The projection factor is the horizontal distance from the surface of the wall to the farthest most point of the overhang divided by the vertical distance from the first floor level to the bottom most point of the overhang.
3. Concrete, CMU, and similar mass walls are 6 inches or greater in thickness.

The R-value of integral insulation installed in concrete masonry units shall not be used in determining compliance with Table C402.1.3.

Mass walls shall include walls:

1. Weighing not less than 35 psf (170 kg/m²) of wall surface area.
2. Weighing not less than 25 psf (120 kg/m²) of wall surface area where the material weight is not more than 120 pcf (1900 kg/m³).
3. Having a heat capacity exceeding 7 Btu/ft² °F (144 kJ/m²·K).
4. Having a heat capacity exceeding 5 Btu/ft² °F (103 kJ/m²·K), where the material weight is not more than 120 pcf (1900 kg/m³).

(14) Adding Section C402.4.3.5 to Section C402.4.3. Section C402.4.3.5 is added to read as follows:

C402.4.3.5 Area-weighted SHGC. In commercial buildings, an area-weighted average of fenestration products shall be permitted to satisfy SHGC requirements.

(15) Adding Section C403.2.4.2.4 to Section C403.2.4.2. C403.2.4.2.4 is added to read as follows:

C403.2.4.2.4 Door switches. Opaque and glass doors opening to the outdoors in hotel sleeping units, guest suites, and time-share condominiums shall be provided with controls that disable the mechanical cooling or reset the cooling setpoint to 90° F or greater within five minutes of the door opening. Mechanical cooling may remain enabled if the outdoor air temperature is below the space temperature.

(16) Adding Exception 4 to Section C405.2. Section C405.2 is amended by adding the following Exception 4:

4. Spaces where the designed lighting power densities are less than 70% of the lighting power densities specified in Table C405.2(1) and Table C405.4.2(2).

(17) Amending Section C405.2.4. Section C405.2.4 is amended to read as follows:

C405.2.4 Specific application controls. Specific application controls shall be provided for the following:

1. Display and accent light shall be controlled by a dedicated control that is independent of the controls for other lighting within the room or space.
2. Lighting in cases used for display case purposes shall be controlled by a dedicated control that is independent of the controls for other lighting within the room or space.
3. Hotel sleeping units and guest suites and time-share condominiums shall have a master control device that is capable of automatically switching off all installed luminaires and switched receptacles within 20 minutes after all occupants leave the room.

Exception: Lighting and switched receptacles controlled by captive key systems.

4. Supplemental task lighting, including permanently installed under shelf or under cabinet lighting, shall have a control device integral to the luminaires or be controlled by a wall-mounted control device provided that the control device is readily accessible.
5. Lighting for nonvisual applications, such as plant growth and food warming, shall be controlled by a dedicated control that is independent of the controls for other lighting within the room or space.

6. Lighting equipment that is for sale or for demonstrations in lighting education shall be controlled by a dedicated control that is independent of the controls for other lighting within the room or space.

(18) Adding Section C405.10. Section C405.10 is added to read as follows:

C405.10 Sub-metering. In new buildings with tenants, metering may be collected for the entire building and individually for each tenant occupying a space with three electrical circuits or more. Tenants shall have access to data collected for their space. A tenant is defined as "one who rents or leases from a landlord."

(19) Amending Section C408.2.4.1. Section C408.2.4.1 is amended to read as follows:

C408.2.4.1 Acceptance of report. Buildings, or portions thereof, shall not be considered acceptable for a certificate of occupancy until the *code official* has received a letter of transmittal from the building owner acknowledging that the building owner or owner's authorized agent has received the Preliminary Commissioning Report.

(20) Amending Section C408.3.1. Section C408.3.1 is amended to read as follows:

C408.3.1 Functional Testing. Prior to issuance of certificate of occupancy, the *registered design professional* shall provide evidence that the lighting control systems have been tested to ensure that control hardware and software are calibrated, adjusted, programmed, and in proper working condition in accordance with the *construction documents* and manufacturer's instructions. Functional testing shall be in accordance with Sections C408.3.1.1 and C408.3.1.2 for the applicable control type.

(21) Amending Section C501.4. Section C501.4 is amended to read as follows:

C501.4 Compliance. Alterations, repairs, additions, and changes of occupancy to, or relocation of, existing buildings and structures shall comply with the provisions and regulations for alterations, repairs, additions, and changes of occupancy or relocation, as adopted by the authorities having jurisdiction.

(22) Amending Section C503.3.1. Section C503.3.1 is amended to read as follows:

C503.3.1 Roof replacement. Roof replacement of uninsulated roofs may include any of the following:

1. Energy Star compliant roof covering
2. Radiant barrier

3. Attic ventilation via solar attic fans or ridge ventilation or gable ventilation

(23) Amending Section R101.1. Section R101.1 is amended to read as follows:

R101.1 Title. This code shall be known as the Energy Conservation Code of the County of Kaua'i, and shall be cited as such. It is referred to herein as "this code."

(24) Amending Section R103.1. Section R103.1 is deleted in its entirety and replaced with the following:

R103.1 General. Construction documents and other supporting data shall be submitted to indicate compliance with this code. The construction documents shall be prepared, designed, approved, and observed by a duly registered licensed professional as required by Chapter 464 of the Hawai'i Revised Statutes. The responsible design professional shall provide on the plans a signed statement certifying that the project is in compliance with this code.

EXCEPTION:

1. Any building, electrical, or plumbing work that is not required to be prepared, designed, approved, or observed by a licensed professional architect or engineer pursuant to chapter 464 Hawai'i Revised Statutes shall be certified by the owner.

Specifications and necessary computations need not be submitted when authorized by the Building Official.

(25) Amending Section R103.3.1. Section R103.3.1 is amended to read as follows:

R103.3.1 Approval of construction documents. Approval of construction documents shall comply with the provisions of Chapter 1 of the International Building Code, as amended in Chapter 12 of the K.C.C. 1987, as amended.

(26) Deleted Sections R103.3.2 and R103.3.3. Sections R103.3.2 and R103.3.3 are deleted.

(27) Amending Section R103.5. Section R103.5 is amended to read as follows:

R103.5 Retention of construction documents. Retention of construction documents shall comply with the provisions of Chapter 1 of the International Building Code, as amended in Chapter 12 of the K.C.C. 1987, as amended.

(28) Amending entire Section R104. The entire Section R104 is amended to read as follows:

SECTION R104
INSPECTIONS

R104.1 General. Inspections shall comply with the provisions of Chapter 1 of the International Building Code, as amended in Chapter 12 of the K.C.C. 1987, as amended.

(29) Amending the entire Section R109. The entire Section R109 is amended to read as follows:

SECTION R109
BOARD OF APPEALS

R109.1 General. All cases of appeals shall comply with the provisions of Chapter 1 of the International Building Code, as amended in Chapter 12 of the K.C.C. 1987, as amended.

(30) Amending Section R401.2. Section R401.2 is amended to read as follows:

R401.2 Compliance. Projects shall comply with one of the following:

1. Sections R401.3 through R404
2. Sections R405 and the provisions of Section R401 through R404 labeled "Mandatory."
3. An energy rating index (ERI) approach in Section R406.
4. The Tropical zone requirements in Section R401.2.1.

(31) Amending Section R401.2.1. Section R401.2.1 is amended to read as follows:

R401.2.1 Tropical zone. Residential buildings in the tropical zone at elevations below 2,400 feet (731.5 m) above sea level shall be deemed to comply with this chapter where the following conditions are met:

1. Not more than one-half and not more than 1,000 SF of the dwelling unit area is air conditioned.
2. The dwelling unit is not heated.
3. Solar, wind, or other renewable energy source supplies not less than 90 percent of the energy for service water heating.
4. Glazing in dwelling units shall have a maximum solar heat gain coefficient as specified in Table R402.1.2.1.
5. Skylights in dwelling units shall have a maximum U-factor as specified in Table R402.1.2.
6. Permanently installed lighting is in accordance with Section R404.
7. The roof/ceiling complies with one of the following options:
 1. Comply with one of the roof surface options in Table C402.3 and install R-13 insulation or greater.
 2. Install R-19 insulation or greater.

If present, attics above the insulation are vented and attics below the insulation are unvented.

Exception: The roof/ceiling assembly is permitted to comply with Section R407.

8. Roof surfaces have a minimum slope of ¼ inch per foot of run. The finished roof does not have water accumulation areas.
9. Operable fenestration provides ventilation area equal to not less than 14 percent of the floor area in each room. Alternatively, equivalent ventilation is provided by a ventilation fan.
10. Bedrooms with exterior walls facing two different directions have operable fenestration or exterior walls facing two different directions.
11. Interior doors to bedrooms are capable of being secured in the open position.
12. A ceiling fan or ceiling fan rough-in or whole-house fan may be provided for bedrooms and the largest space that is not used as a bedroom.
13. Jalousie windows shall have an air infiltration rate of no more than 1.2 cfm per square foot (6.1 L/s/m²).
14. Walls, floors, and ceilings separating air conditioned spaces from non-air conditioned spaces shall be constructed to limit air leakage in accordance with the requirements in Table R402.4.1.1.

(32) Amend Climate Zone 1 included in Table R402.1.2 Insulation and Fenestration Requirements by Component, for "Floor R Value" as follows:

<u>Climate Zone</u>	<u>Floor R Value</u>
<u>"1"</u>	<u>NR"</u>

(33) Amend notes for Table R402.1.2 Insulation and Fenestration Requirements by Component, as follows:

"For S1: 1 foot = 304.8 mm.

a. R-values are minimum. U-factors and SHGC are maximums. When insulation is installed in a cavity which is less than the label or design thickness of the insulation, the installed R-value of the insulation shall not be less than the R-value specified in the table.

b. The fenestration U-factor column excludes skylights. The SHGC column applies to all glazed fenestration. Exception: Skylights may be excluded from glazed fenestration SHGC requirements in climate zones 1 through 3 where the SHGC for such skylights does not exceed 0.30.

c. "15/19" means R-15 continuous insulation on the interior or exterior of the home or R-19 cavity insulation at the interior of the basement wall. "15/19" shall be permitted to be met with R-13 cavity insulation on the interior of the basement wall plus R-5 continuous insulation on the interior or

exterior of the home. "10/13" means R-10 continuous insulation on the interior or exterior of the home or R-13 cavity insulation at the interior of the basement wall.

d. R-5 shall be added to the required slab edge R-values for heated slabs. Insulation depth shall be the depth of the footing or 2 feet, whichever is less in Climate Zones 1 through 3 for heated slabs.

e. There are no SHGC requirements in the Marine Zone.

f. Basement wall insulation is not required in warm-humid locations as defined by Figure R301.1 and Table R301.1.

g. Or insulation sufficient to fill the framing cavity, R-19 minimum.

h. The first value is cavity insulation, the second value is continuous insulation, so "13+5" means R-13 cavity insulation plus R-5 continuous insulation.

i. The second R-value applies when more than half the insulation is on the interior of the mass wall.

j. Exemption: R-value for mass walls are not required if mass walls have a covering with reflectance of ≥ 0.64 and/or walls have overhangs with a projection factor equal to or greater than 0.3."

(34) Adding Table R402.2.1. Table R402.2.1 is added to read as follows:

Table R402.2.1. Window SHGC Requirements

<u>Projection Factor of overhang from base of average window sill^b</u>	<u>SHGC</u>
<u><.30</u>	<u>.25</u>
<u>.30 - .50</u>	<u>.40</u>
<u>$\geq .50$</u>	<u>N/A</u>

^bException: North-facing windows with pf > .20 are exempt from the SHGC requirement. Overhangs shall extend 2 feet on each side of window or to nearest wall, whichever is less.

(35) Amending Section R402.1 Exception. Section R402.1 Exception is amended to read as follows:

Exception: The following low energy buildings, or portions thereof separated from the remainder of the building by building thermal envelope assemblies complying with this section shall be exempt from the building thermal envelope provisions of Section R402.

1. Those with a peak design rate of energy usage less than 3.4 Btu/h-ft² (10.7 W/m²) or 1.0 watt per square foot (10.7 W/m²) of floor area for space conditioning purposes.

2. Unconditioned space that does not contain habitable space.

(36) Amending Section R402.2. Section R402.2 is amended to read as follows:

R402.2 Specific insulation requirements (Prescriptive). In addition to the requirements of Section R402.1, insulation shall meet the specific requirements of Sections R402.2.1 through R402.2.13.

Exception: Above-grade walls and ceilings shall be permitted to comply with Section R407.

(37) Amend Section R402.2.5 to read as follows:

R402.2.5 Mass walls. Mass walls for the purposes of this chapter shall be considered above-grade walls of concrete block, concrete, insulated concrete form (ICF), masonry cavity, brick (other than brick veneer), earth (adobe, compressed earth block, rammed earth) and solid timber/logs, or any other walls having a heat capacity greater than or equal to 6 Btu/ft² x °F (123 kJ/m² x K).

Exception: Insulation or R-value for mass walls, indicated in Table R402.1.2, is not required when one of the following conditions are met:

4. Walls have a covering with a reflectance of ≥ 0.64
5. Walls have overhangs with a projection factor equal to or greater than 0.3. The projection factor is the horizontal distance from the surface of the wall to the farthest most point of the overhang divided by the vertical distance from the first floor level to the bottom most point of the overhang.

(38) Adding Section R403.5.5. Section R403.5.5 is added to read as follows:

Section R403.5.5 Solar water heating. Solar water heating systems are required for new single-family residential construction pursuant to HRS 196-6.5.

(39) Adding Section R404.2. Section R404.2 is added to read as follows:

R404.2 Electrical vehicle charger power. Electrical rough-in of a 30 amp circuit for future electrical vehicle charger may be installed in garage/carport area.

(40) Adding Section R404.3. Section R404.3 is added to read as follows:

R404.3 Ceiling Fans. A ceiling fan or ceiling fan rough-in or whole house fan may be provided for bedrooms and the largest space that is not used as a bedroom.

(41) Amending Table 405.5.2(1). Table R405.5.2(1) Building Components Heating Systems, Cooling Systems, and Service Water Heating are amended to read as follows:

<u>Table R405.5.2(1)</u> <u>SPECIFICATIONS FOR THE STANDARD REFERENCE AND PROPOSED DESIGNS</u>		
<u>BUILDING COMPONENT</u>	<u>STANDARD REFERENCE DESIGN</u>	<u>PROPOSED DESIGN</u>
<u>Heating Systems</u>	<u>Fuel type: same as proposed design</u> <u>Efficiencies:</u> <u>Electric: Air-source heat pump with prevailing federal minimum standards</u> <u>Nonelectric furnaces: natural gas furnace with prevailing federal minimum standards</u> <u>Nonelectric boilers: natural gas boiler with prevailing federal minimum standards</u> <u>Capacity: sized in accordance with Section R403.7</u>	<u>As proposed</u> <u>As proposed</u> <u>As proposed</u> <u>As proposed</u> <u>As proposed</u>
<u>Cooling systems</u>	<u>Fuel type: Electric</u> <u>Efficiency: in accordance with prevailing federal minimum standards</u> <u>Capacity: sized in accordance with Section R403.7</u>	<u>As proposed</u> <u>As proposed</u>
<u>Service water heating</u>	<u>Fuel type: same as proposed design</u> <u>Efficiency: in accordance with prevailing federal minimum standards</u> <u>Use: Same as proposed design</u>	<u>As proposed</u> <u>As proposed</u> <u>gal/day = 30+(10x Nbr)</u>

(42) Adding Section R407. Section R407 is added to read as follows:

SECTION R407 **POINTS OPTION**

R407.1 General (Prescriptive). Above-grade walls and roofs are permitted to comply with the points option as an alternative to complying with Section R401.2.1 and R402.2.

R407.2 Requirements. One or more efficiency measures shall be selected for roof and above-grade wall systems from Table R407.1 that cumulatively equal or exceed 0 (zero) points. As an alternative, above-grade walls and roofs are permitted to comply separately by scoring 0 (zero) or greater.

TABLE R407.1
POINTS OPTION

Walls	Standard Home Points	Tropical Home Points
Wood Framed		
R-13 Cavity Wall Insulation	0	1
R-19 Roof Insulation	-1	0
R-19 Roof Insulation + Cool roof membrane ¹ or Radiant Barrier ³	0	1
R-19 Roof Insulation + Attic Venting ²	0	1
R-30 Roof Insulation	0	1
R-13 Wall Insulation + high reflectance walls ⁴	1	2
R-13 Wall insulation + 90% high efficacy lighting and Energy Star Appliances ⁵	1	2
R-13 Wall Insulation + exterior shading wpf=0.3 ⁶	1	2
Ductless Air Conditioner ⁷	1	1
1.071 X Federal Minimum SEER for Air Conditioner	1	1
1.142 X Federal Minimum SEER for Air Conditioner	2	2
No air conditioning installed	Not Applicable	2
House floor area ≤ 1,000 ft ²	1	1
House floor area ≥ 2,500 ft ²	-1	-1
Energy Star Fans ⁸	1	1
Install 1 kW or greater of solar electric	1	1
Metal Framed		
R-13 +R 3 Wall Insulation	0	1
R-13 cavity Wall insulation + R-0	-1	0
R-13 Wall Insulation + high reflectance walls ⁴	0	1
R-13 wall insulation + 90% high efficacy lighting and Energy Star Appliances ⁵	1	2
R-13 Wall Insulation + exterior shading wpf=0.3 ⁶	0	1
R-30 Roof Insulation	0	1
R-19 Roof Insulation	-1	0
R-19 + Cool roof membrane ¹ or Radiant Barrier ³	0	1
R-19 Roof Insulation + Attic Venting ²	0	1
Ductless Air Conditioner ⁷	1	1
1.071 X Federal Minimum SEER for Air Conditioner	1	1
1.142 X Federal Minimum SEER for Air Conditioner	2	2
No air conditioning installed	Not Applicable	2
House floor area ≤ 1,000 ft ²	1	1
House floor area ≥ 2,500 ft ²	-1	-1
Energy Star Fans ⁷	1	1
Install 1 kW or greater of solar electric	1	1

¹ Cool roof with three-year aged solar reflectance of 0.55 and 3-year aged thermal emittance of 0.75 or 3-year aged solar reflectance index of 64.

² One cfm/ft² attic venting.

³ Radiant barrier shall have an emissivity of no greater than 0.05 as tested in accordance with ASTM E-408. The radiant barrier shall be installed in accordance with the manufacturer's installation instructions.

⁴ Walls with covering with a reflectance of ≥ 0.64.

⁵ Energy Star rated appliances include refrigerators, dishwashers, and clothes washers and must be installed for the Certificate of Occupancy

⁶ The wall projection factor is equal to the horizontal distance from the surface of the wall to the farthest most point of the overhang divided by the vertical distance from the first floor level to the bottom most point of the overhang.

⁷ All air conditioning systems in the house must be ductless to qualify for this credit.

⁸ Install ceiling fans in all bedrooms and the largest space that is not used as a bedroom.

(43) Amending Section R501.4. Section R501.4 is amended to read as follows:

R501.4 Compliance. Alterations, repairs, additions, and changes of occupancy to, or relocation of, existing buildings and structures shall comply with the provisions and regulations for alterations, repairs, additions, and changes of occupancy or relocation, as adopted by the authorities having jurisdiction.

(44) Amending Section R503.1.1 Exception 5. R503.1.1 Exception 5 is amended to read as follows:

5. Roof replacement of uninsulated roofs which include at least two of the following:

1. Energy Star compliant roof covering
2. Radiant barrier
3. Attic ventilation via solar attic fans or ridge ventilation or gable ventilation.

(45) Amending Section R503.2. Section R503.2 is amended to read as follows:

R503.2 Change in space conditioning.

Any nonconditioned or low-energy space that is altered to become *conditioned space* shall be required to be brought into full compliance with this code.

Exceptions:

1. Where the simulated performance option in Section R405 is used to comply with this section, the annual energy cost of the proposed design is permitted to be 110 percent of the annual energy cost otherwise allowed by Section R405.3.
2. Split air conditioner systems where the cost to bring the space into full compliance with this code exceeds a five-year payback period based on the additional energy costs of the added space conditioning system. This exemption is subject to use of a split air conditioner system with a SEER rating in the top 25% of readily available units."

SECTION 2. If any provision of this Ordinance or the application thereof to any person, persons, or circumstances is held invalid, the invalidity does not affect the other provisions or applications of the ordinance which can be given effect without the invalid provision or application, and to this end, the provisions of this Ordinance are severable.

SECTION 3. New ordinance material is underscored.

SECTION 4. This Ordinance shall take effect 120 days after the date of approval, but nothing in this Ordinance shall be construed to prohibit any person from complying with the provisions of the new code and amendments thereto adopted hereunder prior to enactment of this ordinance.

Introduced by: /s/ ROSS KAGAWA
(By Request)

DATE OF INTRODUCTION:

April 25, 2018

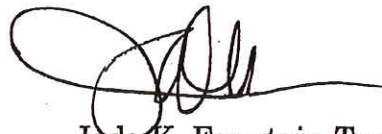
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CERTIFICATE OF THE COUNTY CLERK

I hereby certify that heretofore attached is a true and correct copy of Bill No. 2710, Draft 3 which was adopted on second and final reading by the Council of the County of Kaua'i at its meeting held on November 28, 2018 by the following vote:

FOR ADOPTION:	Brun, Chock, Kagawa, Kaneshiro, Kawakami, Yukimura	TOTAL - 6,
AGAINST ADOPTION:	None	TOTAL - 0,
EXCUSED & NOT VOTING:	Rapoza	TOTAL - 1,
RECUSED & NOT VOTING:	None	TOTAL - 0.

Lihu'e, Hawai'i
November 29, 2018



Jade K. Fountain-Tanigawa
County Clerk, County of Kaua'i

ATTEST:



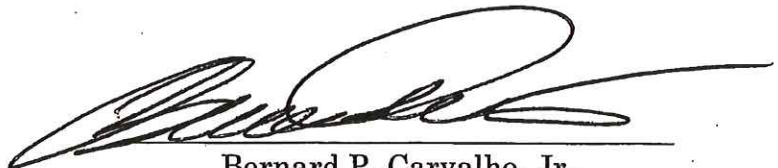
Mel Rapozo
Chairman & Presiding Officer

DATE OF TRANSMITTAL TO MAYOR:

November 29, 2018

Approved this 30th day of

November, 2018.



Bernard P. Carvalho, Jr.,
Mayor
County of Kaua'i